

## SPECIFICATION AMENDMENTS

Paragraph on page 1, lines 4-6:

A<sup>2</sup> | The present invention is a continuation-in-part of US patent application no. 09/348200 09/694404, filed on 6 July 1999 23 October 2000, now US Patent No. 6426406, which is a continuation-in-part of, ~~abandoned~~ and US patent application no. 09/694404 09/348200, filed on 26 October 2000 6 July 1999, currently ~~pending~~ abandoned on 8 November 2000.

Paragraph from page 5, line 22 to page 6, line 6:

A<sup>3</sup> | The Garetz article does not disclose switching the polarization of the light either to cause the nucleation of a desired specific polymorph or to cause the creation of an unexpected (new) polymorphs, as disclosed and claimed in the present patent application. Importantly, as stated, urea has only one polymorph, which will be the polymorph in solution in the advent of nucleation. Therefore, it does not matter in the Garetz article process which polarization state is used - both should result in the single known urea polymorph. More specifically, the Garetz article discloses the effect laser-induced nucleation has on the orientation of the molecules and that the polarization dependence of the crystallite orientation is consistent with a mechanism in which the electric ~~field~~ field of the light plays a major role and that urea molecules are being aligned by the applied optical field, just as they are in the optical Kerr effect, also known as light-induced birefringence. The Garetz article further discloses that only urea's anisotropic polarizability is responsible for electric-field-induced alignment at optical frequencies, thus, according to the Garetz mechanism, urea molecules in a cluster will tend to align with their C<sub>2</sub> rotation axes parallel to an applied electric field, **E**, growing into a crystallite with the needle axis parallel to **E**.

Paragraph on page 17, lines 16-28:

A sample apparatus for carrying out this process is shown schematically in FIG.

A4  
1. The apparatus generally comprises an optical table comprising a laser setup 20, a sample setup 30 and a monitoring setup 40 (comprising camera 14 with filter 5 and monitor 15). The sample setup 30 comprises a supersaturated solution 6 and/or a control sample 7 contained in an appropriate container such as a test tube, a magnetic stage 8, and a sample holder 9. In the apparatus shown in FIG. 1, laser pulses 12 emitted from the laser pass through the black tube 1, the aperture 2, and the half wave plate 3 to enable the rotation of the plane of polarization, and a beam stopper 11. The polarized laser pulses 12 then pass through a calcite prism polarizer 4 to improve the purity of the linear polarization. A quarter wave plate can be placed after the polarizer 4 to switch the polarization. The resulting polarization can be linear, circular or elliptical. The laser 13 oscillator and amplifier typically are set at maximum power. With the example laser 13, the estimated peak intensities incident on the supersaturated solution are approximately  $0.7 \text{ GW/cm}^2$ . With the oscillator alone, peak intensities are about on third of this value. The use of a near-infrared laser is preferred, as this provides a narrow wavelength range for the selection process; however, other types of lasers are suitable for the general process.